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IGR J16547-1916/1RXS J165443.5-191620-a new intermediate polar from the INTEGRAL galactic survey

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Abstract

We present the results of our optical identification of the X-ray source IGR J16547-1916 detected by the INTEGRAL observatory during a deep all-sky survey. Analysis of the spectroscopic data from the SWIFT and INTEGRAL observatories in the X-ray energy band and from the BTA (Special Astrophysical Observatory) telescope in the optical band has shown that the source is most likely an intermediate polar-an accreting white dwarf with the mass ofMWD μ 0.85M⊙ binary system. Subsequent studies of the object's rapid variability with the RTT-150 telescope have confirmed this conclusion by revealing periodic pulsations of its optical emission with a period of ≈550 s. © 2010 Pleiades Publishing, Ltd.

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Keywords

cataclysmic variables, intermediate polars, white dwarfs